riam rotundato; apertura ovali, antice subproducta; plica parietali conspicua, obliqua.

Hab. Mino-Sima; 63 fathoms.

Subgenus Evalea, A. Adams.

Testa elongato-conica, subturrita; spira elata; anfractibus transversim sulcatis aut striatis. Apertura ovata, antice producta; plica parietali transversa, valida.

The fact of many species of this genus being transversely grooved or striated is, I consider, of sufficient importance to keep them distinct, as peculiarities of surface and sculpture are great aids in determining species.

12. *Odostomia* (*Evalea*) *elegans*, A. Adams.

O. testa conica, oblonga, vix rimata, solidiuscula, albida; spira acuminata; anfractibus normalibus 5, convexiusculis, transversim sulcatis; sulcis exaratis; apertura ovata, antice subdilatata; labio crasso; plica parietali transversa, valida.

Hab. Mino-Sima; 63 fathoms.

13. *Odostomia* (*Evalea*) *pyramis*, A. Adams.

O. testa oblongo-conica, turrita; spira acuminata, producta; anfractibus normalibus 5, convexiusculis, transversim sulcatis; apertura oblonga; labio incrassato; plica parietali valida, transversa.

Hab. Mino-Sima; 63 fathoms.

14. *Odostomia* (*Evalea*) *arcuata*, A. Adams.

O. testa ovato-acuminata, subumbilicata, spira elata subtortuosa retrorsim inclinata, alba, solida; anfractibus normalibus 5, planatis, tenuiter transversim striatis; apertura oblonga, antice producta et acuminata; labio incrassato; plica parietali transversa, valida.

Hab. Mino-Sima; 63 fathoms.

Shanghai, Feb. 10, 1860.

V.—*On the Occurrence of Spiders and their Webs in Coal-pits.* By R. H. Meade, F.R.C.S.

Extensive masses or layers of web-like tissue have often been noticed in some of the northern collieries, and they have generally been considered as the mycelium of a fungus; in fact, some years back, a filamentous cottony substance, obtained in some of the Durham coal-pits, was submitted by Mr. Hunt (of the London Mining Record Office) to the examination of the Rev. M. J. Berkeley, and pronounced by him to be fungous matter.

On the 7th of February last I received a small spider from Mr. Stainton, the learned editor of the 'Entomologists' Annual,' accompanied by a note stating that it had been sent to him to be named, by a correspondent who gave the following account of it:—"It is the insect which spins those enormous and compact sheets of web in all our northern collieries; and I feel interested in it, for I believe that some eminent naturalists have contended that these webs were not the production of a spider, but fungi." The spider was a minute species of *Neriene*, not quite the eighth of an inch in length, which had become dry and shrivelled, so that it was impossible to determine its specific name. I wrote word to that effect to Mr. Stainton, and also said that it seemed highly improbable that such a small spider could construct large masses of web, even if the structures in question were really the production of spiders at all, which I doubted, but which question, I added, might easily be settled by examining some of them with the microscope.

On the 16th of February I received another communication on this subject, from Mr. David P. Morison, of Pelton Colliery, Chester-le-Street, Durham (the gentleman who had written to Mr. Stainton). He enclosed in a letter a living specimen of the same spider which I had received before, and also a small portion of web wound round a piece of wood. In his letter, Mr. Morison said, "Mr. Stainton was so kind as to forward your letter to me for perusal; and I see that you doubt that these enormous webs are the production of these little creatures. If they are *fungi*, how can the following facts be accounted for?—1. On passing, last night, through the portion of our underground workings in which these webs abound, I observed that the gaps I had made in the webs on my last visit to that quarter were being spun over again; and on one of them I counted twenty-three or twenty-four little spiders busily engaged in mending the rent. 2. In these webs, on closer inspection through a small pocket magnifier, I discovered a few wings, &c., of a small Midge (at least I imagine them to be so), surrounded by several coats of web." Mr. Morison added that the webs clung with great tenacity to the face and hands of any one passing through them; and also that they could be wound round a piece of wood, which he did not think the filamentous tissue of a fungus could be.

On examining the small specimen of tissue sent to me, I at once saw that it was genuine spiders' web, which had become blackened with coal-dust; and on looking at it through a microscope, I found adhering to it numerous scales from the wings of moths (apparently belonging to the family of the *Tineidæ*), and also fragments of the legs and bodies of the same insects. The

spider enclosed with the web I determined, on careful examination, to be an adult male of *Neriene errans*, a small species of a pale brown colour, described by Mr. Blackwall *, which had hitherto been found only among grass, and on rails, in North Wales and in the south of Lancashire. Apparently from its living in a subterranean abode, its colour was more dusky than that of the ordinary terrestrial species, which made me suspect at first that it might be a new, though a nearly allied, species; but several more mature individuals, both male and female, having been sent to me, at my request, by Mr. Morison, all doubts as to their identity with *Neriene errans* was removed, both from my own mind and from that of my friend Mr. Blackwall, to whom I submitted them.

The portion of web which I received was so small, that I thought it possible that masses of filamentous fungous matter might also exist in the mines; so I requested the favour of a larger specimen for examination. Mr. Morison promptly acceded to my wish, and sent me a mass of similarly blackened tissue, which also I found to be genuine cobweb. Mr. Morison likewise forwarded (through Mr. Read, of the Pelton Colliery) another portion to Mr. Hunt, of the Mining Record Office, who submitted it to Mr. Berkeley for his opinion, which fully coincided with my own.

Mr. Morison says, in one of his letters to me, that when the webs are spun in damp places, they appear, like everything else there, to be dotted all over with a kind of mould; and he thinks that this, having been examined casually, might have led to the supposition that the webs themselves were fungous growths.

The mine in which these spiders and their webs were found is called the Pelton Colliery. The seam of coal (part of the "Hutton seam") averages 4 feet 6 inches in thickness, and is 320 feet below the surface of the ground; about 75 horses and ponies are employed in the mine; and Mr. Morison suggests that the insects upon which the spiders live are conveyed down with the fodder for the horses. He also tells me that "the spiders themselves are to be found in the *waste*, or parts of the pit not actually at work; and the webs are generally spun in galleries through which little or no air passes. The spiders seem to be quite gregarious, as whenever a rent has been made in any one of these productions, they may be counted by scores together (so our wastemen tell me) repairing the damage. They seem to be, in spite of their dark existence, very susceptible to light, and the appearance of a lamp produces no small commotion amongst them."

It is an exceedingly interesting fact that a minute spider,

* Linn. Trans. vol. xviii. p. 643.